

Application No.: 09/928,991Docket No.: 4459-058**REMARKS**

Reconsideration and allowance of the subject application in view of the foregoing amendments and the following remarks is respectfully requested. Entry of this Amendment under Rule 116 is merited as it raises no new issues and requires no further search.

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The Examiner's indication of allowable subject matter of claims 17-19 is noted with appreciation.

Claims 1-3, 11-16 and 18-22 are pending in the application. Claims 1, 11, 14, 15 and 18 have been amended so as to better define the present invention. Support for these amendments is found in Figs. 4 and 5 of the application as filed. Claims 4, 5 and 17 have been cancelled without prejudice or disclaimer. The limitation of claim 17 has been incorporated into independent claim 15. The indicated allowable subject matter of claim 17 is now claimed in claim 16.

No new matter has been introduced through the foregoing amendments.

**Finality of the last Office Action**

The finality of the last Office Action should be withdrawn because at least the rejection of claim 22 is improper. Claim 22 is rejected under 35 U.S.C. 103(a) as being obvious over *McFarren*. This rejection is traversed because the *McFarren* is non-analogous art.

"In order to rely on a reference as a basis for rejection of an applicant's invention [under 35 U.S.C. 103(a)], the reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned." *In re Oetiker*, 977 F.2d 1443, 1446, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992). See also *In re Deminski*, 796 F.2d 436, 230 USPQ 313 (Fed. Cir. 1986); *In re Clay*, 966 F.2d 656, 659, 23 USPQ2d 1058, 1060-61 (Fed. Cir. 1992) ("A reference is reasonably pertinent if, even though it may be in a different field from that of the inventor's endeavor, it is one which, because of the matter with

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which it deals, logically would have commended itself to an inventor's attention in considering his problem."); and *Wang Laboratories Inc. v. Toshiba Corp.*, 993 F.2d 858, 26 USPQ2d 1767 (Fed. Cir. 1993). *See MPEP*, section 2141.01(a).

In this particular case, the applied reference, i.e., *McFarren*, is neither in the field of applicant's endeavor nor reasonably pertinent to the particular problem with which the inventor was concerned.

*McFarren* is not in the field of applicant's endeavor, i.e., mold cleaning substrates, because it is related to the unrelated art of bonding fabrics. *See* column 1, lines 5-15 of *McFarren*.

*McFarren* is not reasonably pertinent to the particular problem with which the inventor was concerned, i.e., mold cleaning substrates that allow to reduce the cleaning compound usage, because the matter with which *McFarren* deals, i.e., providing strong, flexible and air-pervious fabrics, logically would *not* have commended itself to the inventor's attention in considering the problem of providing mold cleaning substrates that allow to reduce the cleaning compound usage. *See* column 1, lines 30-40 of *McFarren*.

Accordingly, the rejection of claim 22 relying on *McFarren* is absolutely improper and should be withdrawn. For this reason alone, the finality of the last Office Action should also be withdrawn. Applicants will nevertheless proceed with their remarks.

**Rejection of Claims 1-5, 11-14 and 15-16 under 35 USC § 102(b)**

Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by any of *Fox et al.* (US 3,130,412), *Sawdai* (US 5,366,785) or *Ruppel et al.* (US 5,443,889). Claims 1-5 and 11-14 are rejected under 35 U.S.C. 102(b) as being anticipated by *McFarren* (US 3,575,764). Claims 1, 2, 4, 5, 15 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by

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*Kitaura et al.* (US 4,935,175). These rejections are believed overcome in view of the above amendments.

Amended claim 1 is now directed to a cleaning substrate used in a process for cleaning and regenerating a mold having at least a mold cavity. The cleaning substrate includes thereon at least a protrusion which substantially conforms in shape with the mold cavity and is adapted to be contained within the edges of the mold cavity of the mold, wherein the protrusion and the mold cavity define a space to be filled with a cleaning compound used for cleaning the mold.

Amended claim 11 is directed to a cleaning substrate for use in cleaning a semiconductor packaging mold, which comprises an upper mold having a plurality of first recesses and a lower mold and has a plurality of mold cavities defined between the first recesses and the lower mold. The substrate comprises a strip of paper. The strip has on an upper surface thereof a plurality of raised portions arranged to be spaced from each other, in a single row, longitudinally of the strip. Each of the raised portions substantially conforms in shape with one of the first recesses and is adapted to be completely received within one of the mold cavities of the semiconductor packaging mold, wherein each raised portion and the corresponding mold cavity define a space to be filled with a cleaning compound used for cleaning the mold.

Although *Fox et al.* (US 3,130,412), *Sawdai* (US 5,366,785), *Ruppel et al.* (US 5,443,889) or *McFarren* (US 3,575,764) might have disclosed sheets (made of, e.g., paper, tissue, and thermoplastic film) having protrusions/embossments thereon, the references fail to teach or suggest the use of the sheets in a process for cleaning a (semiconductor packaging) mold. Further, the applied references or their combinations fail to teach or suggest that the protrusion/raised portions substantially conforms in shape with the mold cavity/first recess

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and that each protrusion/raised portion and the corresponding mold cavity define a space to be filled with a cleaning compound used for cleaning the mold (as recited in amended claims 1 and 11). The above highlighted limitations are positive structural limitations that clearly distinguish the claimed invention from the applied references. In addition, since the preambles of amended claims 1 and 11 now recite the mold cavity/first recess(es) with which the protrusion/raised portion(s) of the cleaning substrate conforms in shape, the preambles have limited the structure of the cleaning substrate, through the wording "conforms in shape," and should be given weight. In claims directed to articles and apparatus, any phraseology in the preamble that limits the structure of that article or apparatus must be given weight. *See In re Stencil*, 828 F.2d 751, 4 USPQ2d 1071 (Fed. Cir. 1987). Therefore, amended claims 1 and 11 are not anticipated by *Fox et al.*, *Sawdai, Ruppel et al.* or *McFarren*.

Claims 2-3 and 12-14 are considered allowable for the reasons advanced above with respect to claims 1 and 11 from which they depend.

In addition, the substrate shown in Fig. 5 of *Kitaura et al.* (US 4,935,175) is a final molding product (column 8, lines 28-30 of *Kitaura et al.*) which is obtained during the molding cleaning process and is, therefore, clearly distinguishable from the cleaning substrate of the claimed invention which is to be put into the mold during a completely different process, i.e., the cleaning process. Further, *Kitaura et al.* fail to teach or suggest that the protrusion and the mold cavity define a space to be filled with a cleaning compound used for cleaning the mold (as recited in amended claim 1). The final molded product 1 in FIG. 5 of *Kitaura et al.* generally does not leave any unfilled space in the mold cavity 31/32. Therefore, claim 1 is not anticipated by *Kitaura et al.* Claim 2 dependent on claim 1 is considered allowable for at least the same reason.

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Claim 15 has been amended to incorporate the limitation of allowable claim 17 and is therefore believed to define over the art, especially *Kitaura et al.*

**Rejection of Claims 20 and 21 under 35 USC § 103(a)**

Claims 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Kitaura et al.* (US 4,935,175) in view of the applicants discussion of the prior art. This rejection is believed overcome in view of the above discussion with respect to amended claim 15 and the dependency of claims 20 and 21 on claim 15.

Accordingly, all claims in the present application, namely, claims 1-3, 11-16 and 18-22, are now in condition for allowance. Early and favorable indication of allowance is courteously solicited.

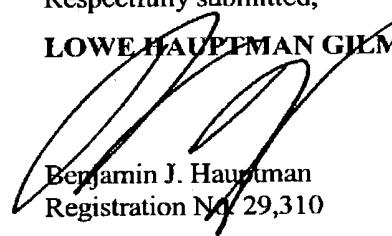
The Examiner is invited to telephone the undersigned, Applicant's attorney of record, to facilitate advancement of the present application.

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To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 07-1337 and please credit any excess fees to such deposit account.

Respectfully submitted,

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